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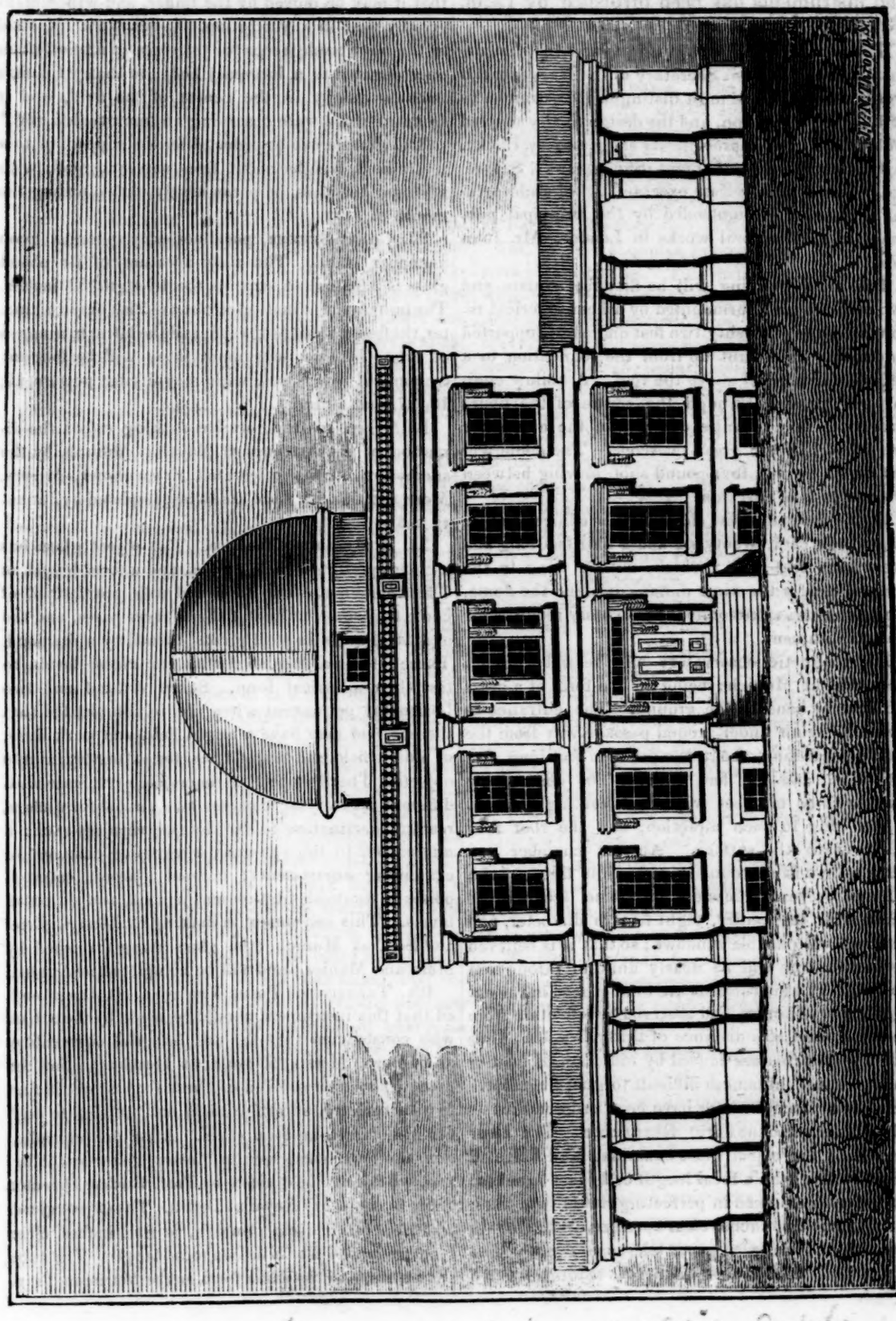
NATIONAL OBSERVATORY.



The large dome was arrived May 26, 1844. Sold 3. 4 69

DEPOT OF CHARTS AND INSTRUMENTS.

On the preceding page is an engraving representing the front view (north) of the National Observatory, now building on the high elevation, in the western part of the city, near the bank of the Potomac, at the corner of D street north and 24th street west.

The following description of the building, and instruments has been furnished by Lieut. GILLISS.

The plan for the Depot of Charts and Instruments submitted to the Hon. Secretary of the Navy last fall was presented to the most distinguished astronomers of Europe for revision, and the design finally adopted embraces all the improvements suggested by Encke, Airy, Schermacher, Lamont, Sheepshanks, Sabine, &c. The drawings were executed by an architectural draftsman recommended by the principal publisher of architectural works in London, Mr. John Weale.

The main building will be fifty feet square and two stories high; surmounted by a hemispherical revolving dome of twenty-two feet diameter, supported on circular walls built up from the foundation to a height of seven feet above the roof. A hollow conical pier passing through the centre of the house terminates in a granite cap within the cupola for the support of the great telescope. The dome will rest on six twenty-four pound shot, moving between grooved rails of cast iron.

To the east and west sides of this edifice, will be built wings, each twenty-six and a half feet long and twenty-one feet wide; which, with a wing to the south of nearly the same dimensions, and the dome, constitutes the astronomical observatory required for the establishment.

The magnetic observatory will resemble somewhat that at Munich; being in the form of a cross and entirely beneath the ground. The entrance to it will be by an under-ground passage-way from the principal building, about one hundred feet long, five feet wide, and ten feet high. The observatory itself, will be ten feet wide, ten feet high, seventy feet long in each direction, and the roof four feet beneath the surface. An air chamber ten nches wide will surround it, to permit free circulation and prevent dampness. A dome light will be placed over the centre, eight feet in diameter, and furnished with double windows; so that it is believed the temperature will be nearly uniform throughout the year. The instruments are to be placed in the extremities of the cross, and observed by reflection from the same point at a distance of thirty-five feet; thus avoiding disturbances caused by radiation of heat or other personal influences difficult to guard against.

The instruments which have been ordered are:

1st. GREAT ACHROMATIC REFRACTOR. The clear aperture of the object glass examined and reflected is 9.56 inches, with a focal length of 14 feet 3 inches; and the time occupied in perfecting it was two years. The finder is 2.63 inches clear aperture, and 32 inches focal length: quite a good telescope itself. The hour circle is 15.0 inches diameter, reading by two verniers with prismatic eye-pieces to 2″ time, and the declination circle 21.0 inches diameter, reading by two verniers with direct oculars to 4″ arc. Five astronomical eye-pieces with magnifying powers, 142, 212, 320, 480, and 760 times, and eight eye-pieces for the repeating lamp micrometer with powers from 94 to 1,000 times. The weight of the instrument, with its counterpoises, will be rather more than two thousand pounds, yet it is so accurately balanced, that it may be moved by the finger, and will remain equally well in any position. Clock-work attached to the hour circle keeps the telescope in motion when once directed to a heavenly body, so that "the star remains quietly in the centre of the field, and it seems as if we were observing an immoveable sky."

The granite cap or pedestal for the support of this instrument, weighs about five tons, and will, with all the other piers, be permanently placed during the month of July.

2d. COMET-SEEKER, parallactically mounted upon a copper stand. The clear aperture of its object glass is 3.90 inches, and its focal length 32 inches. The hour and declination circles are 5 inches in diameter, the first divided to 4″ time, and the latter to minutes of arc. To this instrument there will be four astronomical eye-pieces, with magnifying powers 12, 18, 27, and 40 times.

Both these instruments are making under the direction of the Astronomer Royal at Munich, by the successors of the celebrated Frauenhofer, Messrs. Merz and Mahler; and are to be completed by January next.

3d. A MERIDIAN TRANSIT. The object glass has a clear aperture of 5.44 inches, and a focal length of 7 feet 5 inches. The tube and axis are formed of conic frustrums, united at their larger bases, and the axis terminates in steel pivots, turned by a diamond. These latter are furnished with transverse levels, to test their spherical form. Seven vertical and two horizontal permanent wires are so illuminated that the observer may have a bright field and dark lines, or a dark field and bright lines, for extremely minute objects. There are four astronomical eye-pieces with different magnifying powers; two circles for finders, reading *declination* to 10″ by two verniers each; a micrometer in the eye end; a reversing carriage for examining adjustments; colored glasses, counterpoises to diminish friction on the axis, and six extra levels. This instrument is making by Messrs. Ertel and Son, at Munich, (the glass being furnished by Merz and Mahler,) and will be completed in August.

4th. TRANSIT FOR PRIME VERTICAL. It was intended that this instrument should be made by the artists who constructed that for the Imperial observatory at Pulkova, Messrs. Repsold, at Hamburg; but the great *Heliometer* ordered of them for Oxford, is first to be completed, and they could not promise to deliver it in less than four years. After due consultation, the order was given to Messrs. Pistor and Martins, who are to be guided by Prof. Encke, Director of the Observatory Royal at Berlin. The object glass, procured for it from Munich, is five inches clear aperture, and 6 feet 5 inches focal length. The tube and axis are of the same form as the Meridian Tran.

sit, the latter being 3 feet 6 inches long, terminating in steel pivots 3.5 inches diameter. The tube is attached to one extremity of the axis and counterpoised; the reversing stand, counter-weights to diminish friction in the Y's, &c., being secured between the bearing axis, to facilitate reversal in observing. There is but little difference between the construction of this instrument and that at Pulkova; it will be furnished with a 7½ inch circle for finder, reading to 10″ by two verniers; a micrometer in the eye-piece, extra levels, lamps, &c., and will be completed about the 1st October. The pier for this instrument weighs more than eleven tons, and is in one stone.

5th. The Mural Circle. By the advice of the Astronomer Royal at Greenwich, and many distinguished Fellows of the Royal Astronomical Society, Mr. William Simms (surviving partner of Troughton) was directed to differ from the usual mode of construction, and *cast the circle in one piece.* The cast has been completed, and the rough exterior turned off in a lathe, so as to permit an examination of the metal. So far, it gives entire satisfaction, and there is every reason to believe its results will be more uniform than those of similar instruments hitherto made. The diameter is a little more than five feet; it will be divided on a band of gold and numbered on one of palladium. The telescope has a clear aperture of four inches; is furnished with micrometer in the eye end, four extra eye-pieces, apparatus for regulating light, &c., and a plumb-line apparatus for adjusting the axis.

The readings will be by six micrometer microscopes, screwed to the pier. The instrument is to be furnished with all necessary tangent screws, clamps, and plugs for fixing to the pier, and is to be completed by September next.

6th. Magnetic Instruments. *Declination magnetometer.* The frame work is a massive marble base, supporting two copper pillars 36 inches long, with mahogany cross-pieces to strengthen them and secure the glass tube enclosing the suspension apparatus. The magnet bar is 12 inches long, ⅞ inch wide, and ¼ inch thick, and is to be gilded, to prevent oxidation. It is to be suspended by fibres of untwisted silk, from an adjustable pin six inches long, which is attached to the torsion circle; and will rest in a stirrup furnished with a mirror to read the declination changes by reflection. It will be enclosed in two boxes nearly air-tight; the top, bottom, and ends of the inner box of pure burnished copper, and sides of oak, covered with gilt paper; the outer box of deal, covered with gilt paper. It has been found, that the double enclosure in gilded boxes effectually prevents currents of air caused by the radiation of heat from the inner surfaces, and heavy bars will pass from one position to another, without the excessive vibration to which they have hitherto been subject. Apertures left in each box through which to observe the magnet, are fitted with squares of plate glass that may be reversed to eliminate errors arising from want of parallelism.

Bifilar Magnetometer. The frame-work, supports, magnet bar, mirror, and boxes are the same as the declination instrument. The suspending threads are lodged in the intervals of right and left handed screws, with a micrometer head attached, to vary their intervals, and the instrument is furnished with six grooved wheels, whose diameters increase in arithmetical progression, torsion bar, thermometer divided to half degrees, &c.

Vertical Force Magnetometer. Frame-work same as preceding instruments, with a copper support for the agate planes on which the knife edges of the needle are to rest. The bar is to be of the same length and finish as the others, and will differ from Lloyd's balance magnetometer only in the attached mirror perpendicular to its length and the double enclosure of gilded boxes. The thermometer and level are to be minutely divided, and the scale of the former to project without the cases for more convenient reading. These instruments are making under the supervision of the Astronomer Royal, (G. B Airy, Esq.,) Col. Sabine, R. A., and Rev. H. Lloyd, by Mr. Henry Barrow, the successor of Robinson.

7th. Meteorological Instruments. *Osler's Registering Anemometer.* This instrument, with its clock, wind-vane, registering table, &c., records itself, the time of commencement, force, and duration of every breath of air and every drop of rain that falls. It is simple in its arrangement, comprehended at a glance, and difficult to get out of order.

Standard Barometer. Capacity of the tube .584 in. compared with the standard of the Royal Society; a correction is necessary for their flint glass + .009 and the crown glass + .006. The readings of their two barometers, having a common cistern and common scale, never coincide exactly.

Wet and Dry Bulb Hygrometer.
Daniel's Hygrometer.
Maximum Thermometer, } *Self registering.*
Minimum Thermometer, }
Thermometer in Parabolic Mirror.
Solar Thermometer.

All, except the last two instruments, have silvered metallic scales divided to half degrees; the scales of these last have been engraved on the glass tubes. They have been made by Newman, in London, and are now here.

Library. The books purchased embrace the standard treatises on astronomy and physical science generally, which have been published in the English, French, and German languages. A considerable portion of the most valuable books have been pre ented, among which may be numbered:

Nautical Almanac, from the commencement, and *Astronomical Observations* made in various voyages of discovery, by the Lords Commissioners of the Admiralty.

Memoirs Royal Astronomical Society, and other publications, by the Society.

Greenwich, *Cambridge*, *Edinburgh*, *Oxford*, *Berlin*, *Brussels*, and *Munich* observations, by the respective Astronomers.

Madras Observations, by the honorable East India Company; and many rare works by individuals devoted to the advancement of science.

It is hoped that the buildings will be ocmpleted, and the instruments mounted ready for use, by the 1st July, 1844.

THE GREAT COMET.

HIGH SCHOOL OBSERVATORY, *May* 20, 1843.

To the Editor of the Philadelphia Gazette:

DEAR SIR: You will please find room in your columns for a conclusion—perhaps a final one—concerning the great comet of the 27th of February, 1843, the most remarkable body ever seen by mortals, and whose visit to its perihelion on that day will, for ages to come, constitute the most memorable epoch in the history of the world. The lost Pleiad, which, by-the-by, was not lost, has been sung by the poets—the tail of the February comet wandering without a head remains to be sung, or rather to be related in humble prose. You have doubtless read in the columns of the United States Gazette, as well as in your own, of the progress of inquiry relative to this strange visiter. First, he was found to have come nearer to the sun than any comet on record, except that of 1680; next, he was supposed by ourselves (see the Philadelphia Gazette of April 6) to be the same as the great comet of 1689. Prior to this, his identity with that of 1668 had been suggested by Professor Pierce, and subsequently by Mr. Cooper, of Nice, and by Professor Schumacher, of Denmark. His resemblance to that of 1689 was more fully confirmed by Professor Pierce, in the Boston Courier, under date of April 24; finally, in the United States Gazette of May 11, Professor Kendall and myself pointed out its resemblance to both, and suggested the probability of a period of 21⅛ years. Lastly, in the United States Gazette of the 18th instant, we stated that the result of a careful and deliberate discussion of the observed places, and of the conic section in which it moves, led us to the full conviction that the orbit was an hyperbola, and that the perihelion point was within the body of the sun more than half way to its centre. Finally, in the United States Gazette of this morning we have given the hyperbolic elements and the corrections of Mr. Downes's ephemeris computed from them, compared with the similar corrections of Mr. Downes's ephemeris computed from the best parabolic elements. The sum of the squares of the errors of the hyperbolic ephemeris is about one-hundredth part as great as that of the parabolic ephemeris, leaving no doubt that the hyperbola is the true conic section.

Last evening I saw for the first time a communication in the Courier des Etats Unis, of the 22d April, by M. Arago, containing a statement of the results obtained by the astronomers of the French Academy. Their elements are as follows, compared with those which I published in the Inquirer of April 18, a few days previous to Arago's communication:

Arago.—Perihelion passage, Feb. 27, 10h. some min. at Paris.

Walker and Kendall, Feb. 27, 10h. 38 min.

	deg.	min.	sec.
Arago.—Longitude of the perihelion,	278	45	30
Walker and Kendall,	277	43	54
Arago.—Longitude of the ascending node,	2	10	0
Walker and Kendall,	1	55	19
Arago.—Inclinations,	35	31	30
Walker and Kendall,	35	34	1
Arago.—Perihelion distance,	0	005	400
Walker and Kendall,	0	007	019

Arago.—Motion, retrograde.

Walker and Kendall, do

The elements of the Parisian astronomers are nearer to ours than any we have seen. They will probably give the places of the comet, with errors about the same as ours; that is to say, many times greater than our recent hyperbolic elements.

The hyperbolic elements are—

Perihelion passage, Feb. 27,83665	m. t. Greenwich.		
Long. of perihelion, 290° 47′ 1″	06	m. eq. M.	30.
Long. of ascending node, 66° 8′ 3″	30	"	
Inclination, 47° 14′ 52″	08	"	
Perihelion distance, 0.002075	12	"	
Eccentricity, 1.00149	11	"	
Mean sidereal daily motion, 938 sec. .6240		"	

Motion retrograde.

We compared all our observations with the best ephemeris we could obtain, which was computed from our elements at our request by Mr. John Downes, the editor of the United States Almanac, and obtained from the average corrections concurring together near the 20th and 30th March and 9th April, three normal or average places of the comet: for Greenwich mean midnight, which are far more correct than the result of any single measure. We give them for the use of astronomers, freed from refraction, parallax, and aberration:

	Right ascen.	Dec. south.
March 20, 5-10ths;	46° 5′ 38″ 4	9° 9′ 45″ 5.
March 30, 5-10ths;	59° 5′ 1″ 2	6° 30′ 32″ 5.
April 9, 5-10ths;	68° 5′ 4″ 6	4° 45′ 35″ 7.

The parabolic elements, which give an orbit passing through the first and last places with an interval of twenty days, show an acceleration or parabolic excess for the middle date of 228 seconds. This might be somewhat diminished by varying the elements, but in doing so the perihelion point would fall within the sun as before. This excess of 228 seconds we cannot as before ascribe to the error of the middle normal place, which we believe to be not greater than six seconds.

The parabolic elements of all the computers fail to represent the place of the tail on the 23d of February. They locate its direction south of Orion, whereas we know that its direction was north of that constellation. Our hyperbolic elements give its place correctly.

The corrections of the ephemeris computed by Mr. John Downes from these elements are in seconds of arc.

	Hyperbolic Orbit.		Parabolic Orbit.	
	Cor. R. A.	Cor. dec.	Cor. R. A.	Cor. dec.
March 20. .5	—0″ 5	— 0″ .5	—0′ 0″ .8	add 0″ .2
March 30. .5	—3. 5	—54. 0	—3 57.2	—7 8
April 9. .5	—0. 5	— 0. 2	add 0 3.8	add 1. 4

These are the established facts of the case. The comet struck the sun on the 27th February last, and on the 28th was seen in the day-time departing from the sun in a curve called an hyperbola. Its tail on

650
~~605~~

the 23d, when seen at the High School Observatory by my brother, sister, and myself, was in a position more nearly vertical than it was early in March: that is to say, it was about middle way between the position on the 11th of March and that of the zodiacal light. It was broader and more fan-shaped; the long red rays of the tail were brighter and better marked. So there are to be explained—

1st. The position of the tail on the 23d of February, midway between that of the zodiacal light and that of the tail on the 11th of March.

2d. The almost point-blank concussion of the nucleus with the body of the sun.

3d. The appearance of the *debris* of the comet in the day time on the 28th February and 1st March.

4th. The departure of these *debris* from the sun to distant regions, in that particular conic section called an hyperbola.

5th. The probable identity of this comet with the comets of 1668 and 1689, with a period of twenty-one and seven-eighths years, and a consequent elliptic orbit of the nucleus previous to the concussion on the 27th of February.

One method of explaining *part* of these facts is, to suppose the comet struck the sun and *rebounded*. This would not change the *conic section*, viz., the hyperbola; but would merely change the position of the line of apsides in the plane of the orbit, leaving the position of the plane in space unchanged. This theory will not account for facts Nos. 1 and 5. The line of apsides must, before the rebound, have been too remote from its subsequent position to locate the tail on the 23d of February where we know that we saw it; and the previously hyperbolic orbit is not consistent with the identity of the comets of 1668 and 1689.

The *second* method of explaining these five facts is to suppose that the centre of gravity (an imaginary point) actually passed through the body of the sun eighteen millions of miles from its centre. This idea was suggested some weeks since by Mr. John Downes, and last evening to the American Philosophical Society by Professor Rogers. As the comet could not actually pass through the solid body of the sun, take the possible view of the case, and suppose the *sun went through the almost spiritual substance of the comet*—a substance thinner than the vacuum of an air-pump. In fact, Professor Loomis, of Ohio, conjectured that the entire weight of the comet was not greater than a few pounds of earth. On this hypotheses a great portion of the central nucleus would have been intercepted by the sun, and those parts only would have escaped which, from their remoteness from the centre of the nucleus, could pass outside of the sun. The tail in particular seems to undergo repulsion by the sun, and would readily pass outside, and, adhering to the debris of the nucleus, would go on in the curve due to its orbital motion, and the temporary repulsion of the sun.

Now this theory will explain our five facts. The hyperbolic elements will locate the tail on the 23d of February last where we saw it at the High School Observatory. It will account for the departure of the tail and the debris of the nucleus in an hyperbola, even if the nucleus itself arrived in an ellipse. It will therefore be consistent with this comet's identity with those of 1668 and 1689. It will, moreover, account for the headless appearance of the comet in March, which led superficial observers to doubt whether it was a comet or not. In order, then, that it should be the same as one or both of the comets of 1668 and 1689, it is only necessary that in the last period the perturbations of the perihelion distance should have been about the two-hundredth part of the earth's mean distance from the sun, a change not greater than Halley's or Encke's comets are known to have undergone in a revolution from the effect of perturbations. I have here presented the facts as far as known: I have suggested a theory to explain them all. I have only to add that Professor Kendall and Mr. John Downes, who have shared with me in the labors, concur in these opinions.

Yours, truly, SEARS C. WALKER.

LAWS OF STORMS.

A circular was sent last winter by Mr. Espy to many hundreds of persons in various parts of the world, soliciting such information as would assist him in his "endeavors to find out all the *phases* of storms which occur within the range of the simultaneous observations about to be established."

He has now the pleasure of informing the friends of science (as he does in the National Intelligencer,) that more than fifty observers, who note the barometer, and more than sixty others who have no barometers, have commenced sending in their journals. From the certainty of success, it is *now* hoped that others, who feel disposed to aid in this great undertaking, will commence their observations immediately.

It is his duty to collate all the journals and "report annually to the Secretary of War." A copy of these reports will be sent to each of his regular correspondents as soon as they are published by Government.

More observers are much wanted, especially along the Alleghany Mountains, on both sides; in the northern parts of Vermont, New Hampshire, and Maine; in the "far West," Northwest, and North, and in the ocean between this and Europe.

He takes this opportunity of requesting all his correspondents to visit the path of any tornado within their reach, and let him know the following particulars. The *width* and *direction* of the path—the *direction* in which the trees are thrown down on the *two sides*, and also in the *middle*—whether the trees are thrown inwards *equally* on both sides or more backwards on one side than on the other. If any are thrown across each other, mention on which side of the path, and the direction in which both the *upper* and *under* tree are lying; whether the *line* to which the trees converge on both sides, if they do converge, is in the *centre* of the path, or *nearer* on one side than the other.

These questions apply only to a tornado where it passes through a forest of equal density on both sides of the path, for elsewhere both borders will not be well defined.

National Institute.

The names of only a few of the following Societies in correspondence with the National Institute could be procured in time to be inserted with the list of officers and members published in our last number.

CORRESPONDING SOCIETIES.

AMERICAN.

American Philosophical Society, Philadelphia.
The Albany Institute, Albany.
Academy of Sciences, Boston.
Historical Society, Boston.
Society of Natural History, Boston.
Statistical Society, Boston.
Historical Society, Savannah, Georgia.
Maryland Academy of Sciences, &c., Baltimore.
Society of Natural History, Hartford, Connecticut.
Historical Society, Hartford, Connecticut.
Academy of Natural Sciences, Philadelphia.
Franklin Institute, Philadelphia.
Rhode Island Historical Society, Providence.
American Antiquarian Society, Worcester, Mass.
Western Academy of Natural Sciences, St. Louis, Missouri.
Mechanics' Institute, St. Louis, Missouri.
Lyceum, St. Louis, Missouri.
Philomathic Society, University of Alabama, Tuscaloosa, Alabama.

FOREIGN.

The Royal Society, London.
Society of Antiquaries, London.
Mathematical Society, London.
British Museum, London.
Society for the Encouragement of Arts, Manufactures, and Commerce, London.
Royal Academy of Arts, London.
The Linnæan Society, London.
Horticultural Society, London.
Royal Asiatic Society, London.
Geological Society, London.
Royal Astronomical Society, London.
Zoological Society, London.
Royal Institution, London.
British Institution for Promoting the Fine Arts, London.
London Institution, London.
London Mechanics' Institution, London.
Western Literary and Scientific Institution for the Diffusion of Useful Knowledge amongst persons engaged in Commercial and Professional Pursuits, London.
City of London Literary and Scientific Institution, London.
Royal Society of Literature, London.
Society for the Diffusion of Useful Knowledge, London.
Royal Geographical Society, London.
Statistical Society, London.
Royal Institute of British Architects, London.
Institution of Civil Engineers, London.
Gwyneddigion Society, for the Cultivation of the Language and Literature of Wales, London.
Microscopical Society, London.
Royal Academy of Sciences, Berlin.
Royal Academy of Arts, Berlin.
Royal Museum, Berlin.
Society of Naturforschender Freunde, Berlin.
Society for the Advancement of Horticulture in the Royal States, Berlin.
The Royal German Society, Königsburg.
Royal Academy of Useful Sciences, Erfurt.
Leopold-Caroline Academy of Naturforcher, Breslau.
Academie Royale des Sciences et Belles-Lettres, Bruxelles.
Academie Royale des Beaux Arts, Bruxelles.
Société Royale d'Horticulture, Bruxelles.
Société des Sciences Medicales et Naturelles, Bruxelles.
Museo Nacional de Ciencias Naturalles, Madrid.
Academia Española, Madrid.
Academia de la Historia, Madrid.
Academia de las Nobles Artes, Madrid.
Academia de Ciencias Naturales, Madrid.
Liceo Artistico y Literario, Madrid.
Instituto Español, Madrid.
The Society of Sciences, Prague.
The Institute of Sciences and Arts, Milan.
Hungarian Literary Society, Pesth.
The Johanneum, (Literary Institution,) Grätz.
The Ferdinandeum, (Literary Institution,) Innspruck.
Societies of Sciences, Munich, Göttingen, and Berlin.
Royal Geographical Society, Paris.
L'Institut Royal de France, Paris.
L'Academie Royale de Medecine de France, Paris.
La Société d'Encouragement pour l'Industrie Nationale, Paris.
La Société Royale des Antiquaires de France, Paris.
La Société Royale et Centrale d'Agriculture, Paris.
La Société Geologique de France, Paris.
L'Academie de l'Industrie Française, Agricole, Manufacturiere, et Commerciale de France, Paris.
La Société Française de Statistique Universelle, Paris.
L'Academie Royale des Sciences, Stockholm.
L'Academie Royale des Belles Lettres, d'Histoire, et d'Antiquités, Stockholm.
La Société des Sciences, Upsal.
L'Academie des Sciences Militaires, Stockholm.
The Royal Society of Edinburgh.
The Wernerian Natural History Society, Edinburgh.
The Society of Antiquaries, Edinburgh.
The Phrenological Society, Edinburgh.
The Plinian Society, Edinburgh.
The Society of Arts for Scotland, Edinburgh.
The Geological Society, Edinburgh.
Royal Irish Academy, Dublin.
Geological Society, Dublin.
Zoological Society, Dublin.
Phrenological Society, Dublin.
Philosophical Institution, Birmingham.
Royal Institution, Liverpool.
Philosophical and Literary Society, Liverpool.
Literary and Philosophical Society, Manchester.
Institut Royal des Sciences, de Literature, et de Beaux Arts, Amsterdam.
Société Hollandaise pour les Sciences, Haarlem.
Société de Literature Neerlandaise, Leyden.
Société de Literature Diligentia, the Hague.
Société des Arts et Sciences, Utrecht.
Société des Arts et Sciences, Bois-le-Duc.
Société des Sciences, Hissinque.
Academie des Sciences, St. Petersburgh.
L'Academie Russe, St. Petersburgh.
Institut Pedagogique Central, St. Petersburgh.
Société Imperiale de Mineralogie, St. Petersburgh.
Academie Imperiale de Médecine, et de Chirurgie, St. Petersburgh.
Jardin Botanique de l'Empire, St. Petersburgh.
Société Imperiale d'Histoire Naturelle, Moscow.
Société des Amateurs de la Literature Russe, Moscow.
Academie Imperiale de Medecine et de Chirurgie, Moscow.
Société d'Archéologie et d'Antiquités Russes, Moscow.
L'Accademia delle Scienze, Naples.
L'Accademia delle Scienze, Turin.
The Royal Society of Sciences, Copenhagen.
The Society for the Promotion of the Fine Arts, Copenhagen.
The Scandinavian Literary Society, Copenhagen.
The Royal Society for Natural History and Language, Copenhagen.

The Royal Medical Society, Copenhagen.
The Society for the Promotion of Natural Philosophy, Copenhagen.
The Royal Society for Public Instruction in Iceland, Copenhagen.
The Iceland Literary Society, Copenhagen.
The Royal Society for Northern Antiquities, Copenhagen.
La Société Archéologique d'Athènes, Athens, Greece.
Asiatic Society, Paris.
Batavian Society of Arts and Sciences, Batavia, Java.
Agricultural Society of Singapore, Singapore.
Literary and Agricultural Society of Ceylon, Columbo.
Agricultural and Horticultural Society, Island of St. Helena.
South African Institute, Cape of Good Hope.
Real Sociedad Economica of Cuba, Havana.
The Highland and Agricultural Society of Scotland, Edinburgh.
Royal Agricultural Society of England, London.
Sierra Leone Agricultural Society, Sierra Leone.
Real Sociedad Economica Sevillana, Seville.
Real Sociedad Economica, Malaga.
Real Sociedad Economica, Barcelona.
Real Sociedad Economica Matritense, Madrid.
Agricultural Society, Perth, Swan River, Australia.
Agricultural and Horticultural Society, Sydney, Australia.
New Zealand Agricultural Society, Auckland, (capitol of) New Zealand.
Asiatic Society of Bengal, Calcutta, Horace Hayman Wilson, Esq., Secretary.
Agricultural and Horticultural Society of India, Calcutta, H. Piddington, Esq., Secretary.
Agricultural and Horticultural Society, Agra, Bengal.
Agricultural Society, Cape of Good Hope, P. M. Breda, Esq., Secretary.
Atenco Cientifico Literario de Madrid, Don Juan Miguel de los Rios, Secretary.
Academia de Ciencias Naturales, Madrid, Don Rafael Amar de la Torre, Secretary.
Museo Nacional de Ciencias Naturales, Madrid, Don Ramon Garcia de Marcilla, Secretary.
Sociedad Economica de Amigos del Pais de Grenada, Grenada, Spain.
Sociedad Economica Caditana, Cadiz.
Sociedad Promovedora de Industria Nacional, Lisbon.
Haitien Agricultural Society, Port au Prince, A. Dupuy, Esq., Secretary.
Royal Asiatic Society, London.
Royal Asiatic Society, Bombay.
Madras Literary Society, Madras, C. P. Brown, Esq., Secretary.
Madras Agri-horticultural Society, Madras.
Agricultural Society, St. John's, Newfoundland.
Egyptian Society, Grand Cairo.
Royal Academy of Sciences, Lisbon.

Nag's Head.—Captain Campbell Graham, of the U. S. army, and Walter Gwynn, Esq., civil engineer, have been appointed to make an examination with a view to re-opening Roanoke Inlet at Nag's head, and establishing it as a permanent ship channel from Albermarle sound to the ocean, and report to the Government on the practicability as well as the probable expense of the work. Major Gwynn, who is well acquainted with the subject of inquiry, deems the work practicable. If so, and it shall ever be accomplished, its importance to North Carolina will be incalculable, while it will add another harbor of refuge to vessels on our coast in bad weather, thereby saving an immense amount of property from shipwreck.—*Norfolk Herald.*

Foreign Miscellany.

From the United Service Magazine.

CHAIN-CABLES.

One of the greatest and most beneficial changes of the present century, is the use of iron cables instead of hempen ones, which are well known to be liable to destruction by chafing, and are always deteriorated by alternate exposure to air and water. Now, our good friends over the way wish to arrogate the honor of this useful invention, by stating that it owes its existence to M. Bougainville, who, struck with the manifold imperfections of hemp cables, sagaciously conceived the idea of substituting iron chains for them, so far back as 1771; and this period they further find, by an application of Cocker, to be exactly thirty-seven years before Mr. Slater, Surgeon, R. N., took out his patent for the same in 1808.* But, with all due deference for the precision of those who give these worthless dates, which are adopted by the compilers of the new Cyclopædia ycleped the Penny, it is, strictly speaking, alluding rather to a re-introduction than an invention. Iron chains were used for cables,—the Veneti and Britons in the sea-fight off Armorica, to wit: in the days of Cæsar; and, from what we have noticed on the Italian lakes, have probably ever since been, to a certain extent, in use. At Desegnano, on the Lago di Garda, we saw upwards of fifty vessels furnished with them, before the general adoption of them in our navy. Iron mooring-chains were always in request; and some of extraordinary size were used by Smeaton for riding the Neptune in a rough sea, while he was building the Eddystone Lighthouse, in 1756.

But, in the present case, the mere chain is not the question, since that must always have been sufficiently obvious; the point for discussion properly relates to the introduction of the chain-cable, as at present manufactured. Now this merit, we can safely assert, indisputably belongs to Capt. C. Brown, who was third lieutenant of the Phœnix when she fought the Didon; and who, after three or four years of exertion, managed to introduce them into our Navy in 1811. In the cables under consideration, Captain Brown devised a new mode of closing the links at the side, by means of a long scarf, which rendered the welding more secure; and the form of his links was the result of many experiments, while, to prove their strength, he devised a machine of capacity acting by an hydraulic press. Such being the facts of the case, we deem Captain Brown's claim to be alike unscathed by Bougainville, in 1771, and the patent obtained in 1813 by Mr. Brunton, for the important addition of a stay-pin, or internal support across the middle of each link. This, and the admirable stopper contrived by that excellent seaman Sir Thomas Hardy, the powerful grasp of which will instantaneously arrest the chain in its fullest velocity, render the iron cable almost as efficient as can be desired.

To assist a view of the progress of this invention,

* We have been unable to see Mr. Slater's specification; but, in looking over the patents granted in 1808, we were struck by one for a machine by Viscount de Vaux, capable of showing the latitude and longitude at sea, the course of the ship, the time, and the leeway, and serving also for weighing any object. We never met with this universal marine monitor.

we may here introduce one of the early reports made on the subject to Rear Admiral Sir C. V. Penrose, the Commander-in-Chief on the Mediterranean station, for the information of the Navy Board:

H. M. S. Aid, Adriatic Sea, *August* 5, 1818.

Sir: In answer to your letter of the 10th ultimo, I have the honor to lay before you the result of my observations on the chain-cables and their properties; in describing which it must be borne in mind that this ship is fitted with a windlass.

It may be premised, that, as the chain-cable neither wears by the action of the hawse-holes, the rubbing of rocks, nor the friction of messengers and nippers, and is, moreover, so much easier to stow, and occupies so much less space than the hempen cables, their use is beneficial to the service, and, as it rots not in store, must be economical to the Government.

When anchoring, we have sometimes found them rather unhandy and dangerous; for, if the range is longer than the depth of water, the cable by its weight descends so rapidly as to foul the anchor by falling on it. It is also necessary to have a long range clear of the windlass, as in veering, when there is a short scope and strain, the cable rises at every surge, and frequently the anchor part rides the next. In one instance we were under the necessity of letting go a second anchor, in order to bowse in the cable of the first by a purchase, before we could clear it, the strain being so great as to prevent lifting up the pauls without heaving in. The best method we find in anchoring is to stopper the length of the cable about two fathoms more than the supposed depth of water, having a long range; when the anchor is gone, and the cable appears to grow ahead, off stopper, and the range will run out and fall clear of the anchor, though sometimes the latter will drag a little. The use of this cable is also troublesome in deep water, because its weight, added to that of the anchor, makes it descend with ungovernable velocity, and it is then tedious to heave up.

When at anchor, in any weather, the chain-cables afford perfect safety; for, though not possessed of the same properties of the hempen cables in giving to the scend of the ship, yet the weight of the chain, preventing it from becoming straight, more than makes up the deficiency. In moderate depths one chain-cable may be considered, in point of scope, equal to a cable and a half of hemp.

In weighing with a heavy swell, the chain-cable has several bad properties, and must eventually tend to weaken the bows of a ship; as, from the time the anchor is at long stay apeak until it is out of the ground, the jerks at every rise of the ship are so powerful as to shake the whole frame. It is also more likely to part at this time, from the suddenness of the nip when it becomes straight; while the weight of fifteen or twenty fathoms of it makes it so difficult to heave in with our common windlass, as to render it a dangerous operation in a fresh breeze, with a leeward shore. Slipping would be accompanied with much impediment in disengaging the shackles; and the point is important, since these cables cannot be cut.

Mooring by two chains, with our means, although practicable, is subject to loss of time and great inconvenience, as it is difficult to keep the veering cable slack, even should there be no strain on the anchor part, as its own weight keeps it taut.

But though I do not think it quite eligible, for the above reasons, to be fitted with chain-cables only, I conceive them to be of inestimable advantage to the service; especially when obliged to bring up on a known foul bottom, as was the case with Lord Collingwood's fleet after the battle of Trafalgar. Indeed, I have several times advantageously berthed the aid in places where I should not have thought of dropping an anchor, if I had only been provided with hempen cables.

I have the honor to remain, &c.,

W. H. SMYTH, *Commander.*

Such points being submitted to the serious consideration of the ingenious inventor, every practical property was improved, and the handling was made so manageable, that the adoption of chain-cables rapidly became all but universal. They are now furnished with bolts, at the distance of a fathom, or a couple of fathoms, from each other, by which the operation of slipping may be performed with the greatest facility. A plan has also been contrived, which prevents the anchor and cable from acquiring too great a rapidity of descent; and Hardy's stopper is literally a comptroller-general. Previously to their being supplied to the ships, their strength is proved upon Brown's principle; for the method of estimating the relative strength of the two, by fixing a new hempen cable to a new chain, and straining them till one or the other breaks, was manifestly defective in estimation, because the strength of the one is constantly on the decay, and that of the other is durable. We will, however, show the comparative results arrived at as a general rule, with the diameter of iron forming the links of the chain-cable, considered equivalent to, and supplied instead of, hemp.

Diameter of link.	Weight per fathom.	Size of rope.	Proof.	Ship's burden.	Weight of anchor.
inches.	*pounds.*	*inches.*		*tons.*	*cwt.*
1/2	13 1/2	4 1/4	4 1/2	20	1
9-16	17	5 1/2	5 1/2	35	1 3/4
5/8	24	6	7	50	2 3/4
11-16	27	7	8 1/2	65	3 1/2
3/4	30	8	10 1/8	70	4 1/2
13-16	36	8 1/2	11 3/4	80	5
7/8	42	9	13 3/4	100	5 3/4
15-16	50	9 1/2	15 1/2	130	7
1	56	10 1/2	18	160	8
1-16	62	11	20 1/8	190	9 1/2
1 1/8	70	12	22 3/4	220	10 1/2
3-16	78	12 1/2	25 1/4	250	12
1 1/4	86	13	28 1/2	280	14
5-16	96	13 1/2	31	320	15
3-8	108	14 1/2	34	380	17
7-16	115	15	37	430	20
1 1/2	125	16	40 1/2	480	21
5/8	150	17	47 1/2	550	25
3/4	170	18	55 1/8	750	33
7/8	196	20	63 1/4	1050	46
2	226	22	72	1500	68
1/8	252	25	81 1/4	2000	90
1/4	270	27	90	2600	100

France.—The estimated strength of the army for the present year is 544,000 men* and 84,000 horses, inclusive of 38,000 native troops employed in Algiers. The numbers were reduced to these amounts by disbanding one company in each battalion of regiments of the line and light infantry. The contingent to be levied for the present year, consisting of 100,000 men, will be transferred to the "corps de reserve," instead

* The effective strength is not estimated at more than 440,000.

of being called out for active service. A reduction of 13.400 horses has also taken place. The vote for the Navy Department and the colonies is 91,923.026 francs, or about £3,670,000 The whole army has been provided with percussion lock muskets and pistols, independently of which the Government have 127,300 similar arms in store; and a vote of £19,120 (or 478,000 francs) has been granted for converting 280,000 old muskets, with flint locks, into percussion muskets. An increase is to be made in the corps of "gendarmerie," on the 1st of July next. Its strength will include 593 officers and 14,400 men; they will compose 1,950 brigades mounted, of which 650 are to be composed of 6 men, and 1,350 of 5 men; the remainder, 4,000, will form 800 dismounted brigades, each of 5 men.

Bavaria.—The "Military Almanac" gives the subsequent enumeration. 1 general of cavalry (Prince Charles, of Bavaria,) 16 lieutenant generals, 28 major generals, 40 colonels, 36 lieutenant colonels, 79 majors, 340 captains, 352 superior lieutenants, 399 lieutenants, and 71 cadets and conductors, (guides?) amounting altogether to 1,562; besides 527 civil servants, filling administrative, medical, and judicial situations. To these must be added officers *à la suite*, &c., consisting of 1 lieutenant general, 6 major generals, 7 colonels, 3 lieutenant colonels, 23 majors, and 87 subaltern officers. Adding all these together, the grand total is 2,216. The number of officers pensioned off, or "*en retraite*," is 588; viz, 19 generals, 430 other officers, and 140 military *employés*.

Pembroke, *Wednesday, May* 3.

Launch of Her Majesty's Royal Steam-Yacht Victoria and Albert.—The launch of this magnificent steam-vessel took place here this afternoon in the presence of about 10,000 spectators. Many first rate vessels have been launched at this dock-yard, but none ever created so much interest in their launch as the Victoria and Albert, from her having been specially constructed for the use of Her Majesty.

The following are the principal dimensions of this beautiful vessel:

	Ft.	in.
Length, extreme,	225	0
Length on the deck,	205	0
Length between perpendiculars,	200	0
Length of keel for tonnage,	181	2
Breadth outside paddle-boxes,	59	0
Breadth for tonnage,	33	0
Breadth moulded,	31	11
Depth in hold,	22	0

Burden in tons, 1,049. She is divided into five water-tight compartments, and her engines are of 450 horse power. Her construction is entirely novel, and according to designs prepared by the Surveyor of the Navy; she is considered by competent judges to be superior, in point of beauty, buoyancy, and strength, to any other description of steam-vessel ever produced in this country.

Some idea may be formed of the novel and peculiar style of her construction, as well as of her great strength, when it is stated that she is built only with plank; the two first layers being of oak 1¼ inches thick, placed across each other diagonally, at an angle of 45 degrees, the outside plank being of larch, three inches thich, lying longitudinally or with the sheer of the ship, and the whole being bound up with vertical and diagonal iron bands. Between the layers of plank the surface is covered with thick tarred felt; the vessel therefore cannot leak, nor be in the least degree damp inside; and being divided into five compartments by four water-tight bulkheads extending as high as the state deck, it is impossible for the body ever to sink, although it might be bilged in any part from accident.—*Lon. Naval and Mil. Gazette.*

British Navy.—A return of the ships of the British navy, of all classes, *in ordinary*, on the 1st of December, 1842

First class,	No. 16	Brigs,	No. 15
Second class,	" 15	Brigs, packets,	" 11
Third class,	" 46	Cutters,	" 6
Fourth class,	" 33	Steam-vessels,	" 16
Fifth class,	" 64		
Sixth class,	" 10	Total,	240
Sloops,	" 8		

A return of all classes of the ships of the British navy *in commission* on 1st December, 1842; with a return of the number of officers and men in each class allowed in the complements of the ships:

Class.	Ships.	No. offic's and men.	Class.	Ships.	No. offic's and men.
First rates,	2	1,950	Gun-brigs,		
Second rates,	6	4,700	&c.,	39	1,602
Third rates,	7	4,500	Packet brigs,	7	308
Fourth rates,	8	3,801	Surveying		
Fifth rates,	12	4,000	vessels,	14	1,014
Sixth rates,	14	2,990	Yachts,	3	289
Sloops,	41	5,458	Stationary		
Steam-vess's,	66	3,666	ships,	14	5,368
			Total,	233	39,646

From the United Service Magazine.

DRY-ROT.

Mr. Editor: Your number for March contains, under the head of "Naval Improvements of the Nineteenth Century," some observations respecting that puzzling and annoying enemy of ship-builders, called the "dry-rot." Without the least pretence to scientific knowledge of the subject, or a single opportunity of noticing this disease in ships, I would offer some reasons for believing that at least one active *encourager*, if not *originator* of it, is a want of free circulation of air, or rather obstructed evaporation.

If wood-work in a damp part of a building is painted on the outside, it will inevitably decay in a comparatively short period, the substance of the wood completely perishing. Instances of this are continually to be found in churches, where damp is necessarily more liable to accumulate in the walls, than in houses. The *cause* of this decay is, that the moisture, having penetrated the wood from the wall or ground, is prevented from escaping by the paint on the surface, and consequently speedily destroys the wood. I can adduce, and could show in the village whence I write, a remarkable example how much longer wood in a damp situation will last *unpainted* than painted. The stairs of a cottage, wherein I resided for a short period, were painted at the sides, the centre being carpeted. The boards are elm, and the painted sides are in such a condition that nails will not hold, while the centre is nearly or quite as sound as ever. So also in the church, the wooden lining of the pews against the wall, merely covered with baize, has lasted longer than other wood-work, in *a less damp situation*, which has always been painted; and I believe examination will show this to be the case *generally*. I am, &c., A. H.

Reported for the United States Gazette.

CASE OF COMMANDER MACKENZIE.

Before the Hon. Edward King, *President of the First Judicial District of Pennsylvania.*

Judge King's Opinion.—In our legal column, will be found an interesting and important opinion of Judge King, upon a question connected with the case of Commander Mackenzie, viz: *whether Captain Read and Captain Gwinn must answer as witnesses to prove the vote of the late court martial* The opinion was not in writing; but has been carefully, and, we are well assured, *accurately* prepared by a member of the bar, for our columns; and may be entirely relied on.

Saturday, *May* 20, 1843.

An application was made to the Hon. Edw. King to coerce certain witnesses to answer under *letters rogatory*, from the Supreme Court of New York, requesting the Court of Common Pleas of Philadelphia county, to cause certain witnesses to come before them, to answer certain interrogataries attached to the said letters rogatory, having for their object the ascertainment from the witnesses, Captain Gwinn and Captain Read, (who are two of the members of the late court martial,) the number of the votes given for and against Commander A. S. Mackenzie, on each of the charges and specifications preferred against him. The witnesses appeared, and filed a written protest against testifying, insisting:

1st. That there was no adequate evidence that the sentence of the court martial had been approved by the President of the United States, without which their oaths bound them not to testify.

2d. That if *there was* adequate evidence, the judge ought not to exercise his discretionary power to compel them to testify in a matter (1) which might operate hereafter injurious to the service as a precedent; (2) because it does not appear that the testimony sought from them was *relevant* to the cause pending in New York; and (3) because, under all the circumstances, it might be doubtful whether the Supreme Court of New York themselves would compel the witnesses to testify; and in the argument, although not stated in the protest, it was insisted that the suit was merely brought with a view to obtain the testimony.

3d. That the letters rogatory themselves were, according to the Statute Laws and Practice of New York, irregular.

And, 4th, that if all these reasons failed, yet inasmuch as this was an application to the discretion of the judge, these reasons would, if insufficient, separately, be sufficient, taken together, to induce the Judge to refuse to exercise the discretion asked for.

In delivering his oral opinion, his honor Judge King somewhat inverted the order of these reasons, and commenced by observing upon the 4th objection that, although it was true, the application to him was made to the sound discretion of the court, yet like all other judicial discretion, it was not to be exercised arbitrarily. It was a courtesy proper to be extended by all judicial tribunals one to the other, to aid in the administration of justice, and peculiarly to be regarded when made by the tribunals of sister States. The several States could not be regarded towards each other in this particular as foreign States, that the proper view was to regard the American people as *one great whole*, and to extend to the citizens of each State, as far as practicable, all the advantages which could be given to our own citizens under our own laws. That such a course was, of all others, best calculated to maintain harmony between the several States, as well as between the citizens composing their communities; to contribute to the perpetuity of the Union, and through that great means to promote the work of civil liberty, which our Union was instituted to effect. After further remarks in the same spirit, he concluded by observing that he felt himself bound to comply with the request of the Supreme Court of New York to its fullest extent, where such request was properly laid before him.

As to the first objection, he remarked that it was a question of evidence, upon which he could entertain no doubt, from the proofs now before him. The proofs consisted, in part, of a letter from the Secretary of the Navy to Comm'r Mackenzie, informing him that the sentence of the court martial in his case had been affirmed by the President, releasing him from arrest, and directing him to consider himself as awaiting orders; that although the official communication in the "Madisonian" appeared informal, yet, taken in connection with this letter, left no doubt in his mind upon the point; that, therefore, on this ground, the officers composing the court were not protected by their oaths from disclosing the doings of the court when *legally required.*

As to the *second* exception, the judge remarked that however unwilling he would be to disregard the feelings of the officers now called to testify, or to establish a precedent which might, in any way, weaken the naval arm of the Government, yet that he saw in all this no legal bar to the adduction of evidence to which a citizen is entitled under the laws. That in the administration of justice it perpetually happens that individuals are compelled to testify as to matters which operate against their feelings, yet such a reason never avails against the rule which makes persons liable to testify in courts of justice; and all good citizens must yield their private feelings to the good of the community, as, in fact, a part of the price which is paid for civil liberty. And that however reluctant he ever would be, and now is, to compel gentlemen, situated as these witnesses conceive themselves to be, to testify, yet he could not regard the rules of law as of any value if he were to hesitate to assert them in a case like the present.

As to the *relevancy* of the testimony, the judge remarked that it was a matter exclusively for the decision of the New York tribunal. That he was bound to presume that the questions propounded were considered by the court as relevant; that were he to undertake to regulate his discretion by adjudging upon the relevancy or irrelevancy of questions attached to the letters rogatory, it would make the benefit proposed to be derived from such letters, in many cases, totally illusory. That it was his intention and practice in doing this, or any other judicial acts, to do it *substantially* and *effectually;* and the

object would be best accomplished by leaving to the New York tribunal the solution of the point, whether the questions which they desired him to cause the witness to respond to were relevant or not. That if, as has been said, this was an action brought by Commander Mackenzie for a scandalous libel against him, representing that he had escaped capital punishment by the vote of a minority, and that minority was produced by the tenderness, or pity, of a single individual, it was of the utmost importance to him to prove what was the true number of votes given upon each charge. Upon this view of the subject the questions were not only relevant, but indispensable to the proper investigation of the cause. The judge, however, imagined that there might be a case in which the testimony would be so manifestly inapplicable to the cause of action, as to induce him to refuse to coerce a witness to testify, but that it must be a gross case, indeed, that would justify him in taking such an attitude towards the courts of a sister State in the exercise of an act of comity.

As to the doubt whether the Supreme Court of New York would compel the witnesses to testify, it was a doubt to be resolved by that tribunal itself, and one which he had no sort of right to decide for them. As to the idea that this was a mere *fishing* suit, and not brought for the object which it purports, and merely intended to pry into the doings of the court martial, the judge observed that if it could have been proved to his satisfaction that such was the true character of the proceeding, he would at once refuse to act in the case; for no one has the right to use the process of the law for any such purpose, and he would not permit himself to be used as an instrument in the hands of any man, or set of men, to accomplish such a result; and he was quite satisfied that neither the Supreme Court of New York, nor any tribunal in the United States, would for a moment permit such an abuse of their authority. But nothing in the case showed that this suit was any other than a *bona fide* suit; and his impression was that such was its true character.

The sole remaining question, and the only one on which he felt any difficulty, was, whether the letters rogatory were issued according to the laws and practice of the courts of New York. The result of his own investigations led him to entertain some doubts upon that subject; and while he admitted that he ought, in general, to regard letters rogatory, under the seal of a court, as plenary evidence of their regularity, yet still he had come to the conclusion to defer the final decision of this matter, to give the witnesses an opportunity to present the question to the consideration of the Supreme Court of New York. That if it was true, as alleged, that these letters had been issued contrary to law, undoubtedly the Supreme Court of New York would entertain a motion on behalf of these witnesses, or of any other persons compromised by the issuing of the letters, to quash the proceeding. Any court would do so in vindication of its own dignity; nothing being more repulsive to a court of justice, nor a grosser outrage upon it, than the unauthorized use of its process. That such, undoubtedly, would be his action, in a case similarly issuing from his own court. He concluded by declaring that if the Supreme Court declined interfering, thereby recognizing the regularity of the letters rogatory, all his doubts would be removed upon that subject; and the witnesses must come prepared, on next Saturday, to answer the interrogatories attached to the letters rogatory.

After the conclusion of the opinion, the counsel requested his honor Judge King to reduce it to writing, to which he replied that he would comply with the request if the pressure of his public engagements would enable him to find time to do so.

In order that the public may better understand the opinion given by Judge King in this case, and the reasons which have induced Captains Read and Gwinn to decline testifying, we publish the following papers filed in the Court of Common Pleas.

No. 1.

The undersigned have been served with a subpœna, issued by the Court of Common Pleas for the city and county of Philadelphia, dated the 26th of April, 1843, commanding them to appear before John M. Read and Benjamin Gerhard, Esqrs., commissioners appointed by the said court, under letters rogatory issued out of the Supreme Court of Judicature of the people of the State of New York, at a time and place therein mentioned, to testify all and singular the things they know in a certain action now depending in the said Supreme Court, between Alexander Slidell Mackenzie, plaintiff, and David Hale and others, defendants. They have attended before the said commissioners in obedience to the subpœna, and have ascertained that they are called on to answer certain interrogatories relating to the decision of a naval court martial, of which they were members, recently held at the city of Brooklyn, on charges preferred against Commander Alexander Slidell Mackenzie.

The undersigned respectfully decline answering these interrogatories, or testifying as to the matters inquired of, for the following reasons:

1st. By the act of Congress of April 23, 1800, entitled an act for the better government of the navy of the United States, it is, among other things, provided that each member of a court martial, before proceeding to trial, shall take the following oath or affirmation: "I do swear or affirm that I will truly try, without prejudice or partiality, the case now depending, according to the evidence which shall come before the court, the rules for the government of the navy, and my own conscience; and that I will not by any means divulge or disclose the sentence of the court until it shall have been approved by the proper authority; nor will I at any time divulge or disclose the vote or opinion of any particular member of the court, unless required so to do before a court of justice in due form of law." This oath the undersigned took. By it, as they understand it, they have sworn not to divulge the sentence of the court under any circumstances whatever, until it shall have been approved by the proper authority; and also not to divulge the vote or opinion of any member of the court, unless required so to do before a court of justice in due form of law. They do not understand that they are asked to testify as to individual votes or opinions. They are asked to testify as to the num-

ber of votes on each charge and specification, and thus to disclose the sentence of the court. They do not consider themselves at liberty under any circumstances to do this, until they know officially that the judgment of the court has been approved by the proper authority.

2d. If, however, a different construction be given to this oath, and its obligation be not to disclose the sentence of the court, even when duly confirmed, until they are required to do so before a court of justice in due form of law, the undersigned have still greater doubts of the propriety of their testifying under the peculiar circumstances of this case, and the nature of the process which they are called on to obey. The policy of the military law, and custom too long established to be questioned, clearly require that the secrets which members of a court martial are bound to keep, should not without extreme and absolute necessity be divulged. The undersigned do not desire to be the first to relax an obligation which has so far been kept inviolate; and the requisitions of the law must be most clearly defined before they can reconcile to their sense of duty to themselves and the service to comply with them.

The case in which their testimony is now sought is depending in the Supreme Court of the State of New York, which has issued its letters rogatory, soliciting the Court of Common Pleas of this county, as a matter of judicial comity, to cause the undersigned to be examined. Compliance with this requisition rests wholly in the discretion of the court, to which the letters rogatory are addressed. If the undersigned were present on the trial of the cause in the Supreme Court of New York, they would not, so great do they consider the sanctity of the oath they have taken, disclose any part of what they have sworn to keep secret, unless absolutely required to do so. Before they would be required to give testimony, the court must determine whether the testimony sought would be relevant or proper. If it were determined not to be proper, the court would require no such disclosure. If it were determined to be proper, the court would then, no doubt, seriously consider how far they were bound to "require" witnesses thus situated to answer.

These are questions, no one of which has the Court of Common Pleas, before whose commissioners the undersigned are called on to testify, the means of deciding. Hence, if the undersigned were now to testify, this result may ensue, that after the testimony shall be taken, and the facts which the policy of the military law, and the oath prescribed by the act of Congress, require to be kept secret shall be divulged, the court before which the cause is to be tried may decide the inquiries to be improper, and the testimony to be irrelevant; or may, even if they deem the testimony to be proper, from other considerations refuse to compel its production. The undersigned submit to the commissioners, and through them to the Court of Common Pleas, this view of the case, in the belief that it will induce the court, in the exercise of its wise discretion, to refuse to exert a compulsory power over the undersigned, without which will they, in no event, consent to testify in relation to the matters inquired of.

3. This being a case of first impression, affecting possibly the character and future conduct of that branch of the public service to which the undersigned belong, they think themselves entitled to a competent judicial decision of the doubts which have arisen in their minds in relation to the obligation of the oath they have taken. This decision the commissioners are not authorized to make. It can only be made by the Court of Common Pleas, on a return of the commissioners that the undersigned have refused to testify. To this decision, the undersigned repeat they consider themselves entitled. Then only can they be satisfied that they are "required before a court of justice, in due form of law," to disclose that which they believe themselves bound to keep secret.

In conclusion, the undersigned beg leave to disclaim any want of respect to the commissioners, or to the honorable court by which they are appointed. They are ready to testify whenever they shall be discharged from the obligation which, under the laws of the United States and the custom of the service, they have been compelled to assume.

GEORGE C. READ,
JOHN GWINN.

PHILADELPHIA, *May* 1, 1843.

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No. 2.

To the honorable the Court of Common Pleas for the County of Philadelphia:

The undersigned have received notice of a rule to show cause why an attachment should not issue against them for declining to answer interrogatories under letters rogatory from the Supreme Court of the State of New York, in the suit of Mackenzie *vs.* Hall. They respectfully refer to the reasons presented by them in writing to the commissioners appointed by this court, (and which the undersigned understand have been already exhibited to the court,) as containing sufficient grounds to induce the court to decline making such an order as will compel the undersigned to testify in relation to the matters inquired of.

They would also beg leave respectfully to add, that there are some circumstances connected with the case which may also have an influence on the court in the exercise of its discretion in regard to a compliance with the letters rogatory from the Supreme Court of the State of New York. It is believed by the undersigned, that since the trial before the naval court martial, whose proceedings are the subject of inquiry, several of the members thereof were in or near the city of New York, and within the jurisdiction of the Supreme Court of the State of New York, whose testimony might have been obtained if required, and that at least two of the said members are now in the city of New York.

It does not belong to the undersigned to judge of the motive for seeking testimony at this distance in the mode now pursued; but they respectfully submit to the judgment of this honorable court, that under the circumstances it does not appear to be necessary to the developement of truth or the purposes of justice that the compulsory power of the court should be now exerted.

GEORGE C. READ,
May 15, 1843. JOHN GWINN.

WASHINGTON.

THURSDAY, JUNE 1, 1843.

THE MISSOURI AGAIN.

In our last, we showed upon the principles of capacity and areas that the lateral smoke-pipes on board this vessel could not discharge the gases of combustion, and therefore that the experiment with *these* pipes could not result in any thing else but complete failure. Yet, as an actual experiment was about being made, we promised that should it, by any possibility, prove at all successful, we would take pleasure in noticing the fact. But, as must necessarily have been the case, we were not allowed this pleasure; for while our paper was yet in press, the Missouri herself wrote the Q. E. D. to our demonstration. She went down as far as Fort Washington on the Potomac, Thursday, 26th ultimo, and furnished to every one on board the fullest evidence of the utter unsuitableness of the new pipes. As soon as the boat was put in motion, the steam fell from 13 inches to 1 inch pressure. The smoke, like the frogs of Egypt, filled every man's bed chamber, and drove every body above and below, and from the quarter-deck, forward, to get breathing air. We hope no further expense may be imposed upon the Navy on account of such fruitless experiments.

The history of experiments made by engigineers would show any one that this plan of getting rid of the smoke must fail. The same thing has been tried over and over again, both in this country and in England, and has been given up long ago as an impracticability. On account of bridges and tunnels, it has ever been a desideratum of great importance in canal navigation, to have the smoke discharged by lateral instead of upright pipes in canal steamers. If the originators of this plan on board the Missouri had profited from the experiments that have already been made upon this very subject, the Navy would have been spared the expense, and the Missouri the ridicule, attached to the failure of such an experiment.

We have not been able to ascertain the exact cost to the Navy of this piece of folly; but we have reason to believe that it has already been something like $10,000, exclusive of the pay of officers and crew, the expenses of the vessel and loss to the service of keeping the crew and ship out of employment while the alterations were going on. If we add the expense of *unexperimenting*, that is, of tearing down the costly alterations, and putting the old fixtures back in their places, and the pay of officers and men who are kept idle in the mean time, waiting for their ship, we shall find that the Navy has been put to the expense of some $20,000 or more. We will do the mechanics of the navy-yard the justice to say that they condemned the alteration, as we are informed, from the beginning.

Another feature of this experiment which, in our opinion, calls for loud rebuke, is that it should have been suffered to be practised upon the Missouri, for *experiments* on such a large vessel must of necessity be very expensive. There was the little Engineer steamer in Norfolk that was lying idle, and she would have given the practical demonstration which the Missouri has given, at less than one-twentieth part of the cost. If we are to have for the Navy any more such experiments, we hope the Engineer or the Poinsett, or even the old Fulton, and not the Mississippi or Missouri, will be made the subject of them.

PRIZE FOR THE WEST INDIA SQUADRON.

The President of the Republic of Texas has denounced the commander of the Texian navy a mutineer and pirate. A public proclamation has been issued calling upon the vessels of all nations friendly to Texas to capture and bring in for punishment the Commodore and his forces.

The proclamation sets forth in substance:

"That Commodore MOORE was at several times, from the 29th October up to 23d March officially ordered by the Secretary of War to carry his vessels to Galveston, and finally to go thither in person, leaving his squadron under charge of his second in command; that further, when he had disregarded all these orders repeatedly, Commissioners had been sent, by a secret act of Congress, to displace him from command and take charge of his squadron, and that these he had set at defiance, making sail for Campeachy, though expressly forbidden to do so; that, in consequence, he is suspended from command, all previous orders and authority to him revoked, and he ordered forthwith to return to Galveston. If he disobeys (as he is now known to have done) it is declared that his Government will no longer be responsible for his acts, and all nations at amity with Texas are requested to seize and bring into Galveston him, his vessels, and crews, that they may be arraigned and punished."

This proclamation is dated on the 23d of March, twenty-three days before Commodore MOORE set sail from New Orleans. The Commodore, being aware of the steps which the President might take against him, addressed to the editor of the Galveston Times, under date of April 19, a note, in which he states that he sail d against the Mexicans with the consent of Colonel MORGAN, one of the secret commissioners, now on board his ship, who judged that course to be best for the interests of the Republic.

It now appears that, as far back as the 14th December, President HOUSTON denounced and disavowed all co-operation with Yucatan, and it does not appear distinctly that Commodore MOORE ever had any direct authority to act against Mexico in that quarter.

Should one of our men-of-war in the Gulf fall in with this squadron, it would be a lawful prize.

REVENUE CUTTER JEFFERSON.—We stated last week, on the authority of the New York papers, that the brig *Jefferson* had been sold to the Mexican consul for $2,500. We have since learned from the Department that the following are the facts of the case: The *Jefferson* was built at Baltimore five years since by contract, was surveyed by the underwriter and wardens of the port of New York, and found completely rotten in her frame; was sold to Bartholomew Blanco—not the Mexican Consul—for $3,500, not $2,500, and was bought to send to Havana on speculation.

CAPTAIN J. STURGIS.—By paragraphs in the Boston Post and Times we learn that this active and vigilant officer has rendered important services during the last two months to vessels approaching our coast in distress.

WILLIAM CRUMP, Esq., of Powhatan county, Va., has been appointed Naval Storekeeper for the Washington navy-yard, *vice* CARY SELDEN, Esq., deceased.

Dr. THOMAS HARRIS, of the Navy, it is said, is preparing a biographical memoir of the late Commodore HULL.

REVENUE CUTTER SERVICE.—The orders, promotions, appointments, &c., in this branch of the service will in future be furnished regularly every week.

MONUMENT TO COMMODORE PERRY.—The Newport Mercury mentions that the monument ordered by the Legislature of Rhode Island to be erected over the remains of the late Com. OLIVER H. PERRY has just been completed after a delay of sixteen years. The monument stands on an elevated spot in the northwest corner of the new Burial Ground in Newport, it rises from the centre of a mound in a square of fifty feet, enclosed with a handsome ornamental iron fence with a granite basement. It consists of a granite obelisk, with a pedestal of four feet, and a shaft of twenty-one feet; the base is cased with Italian white marble and fronts to the east. It bears the following inscriptions:

OLIVER HAZARD PERRY.
At the age of 27 years
He achieved the Victory of
Lake Erie.
Born in South Kingston,
Aug. 23, 1785.
Died at Port Spain,
Aug. 23, 1819,
aged 34.
His remains were conveyed to his native land
by a ship-of-War, according to a
resolution of Congress, and
were interred,
Dec. 4, 1826.
ERECTED BY THE
STATE OF RHODE ISLAND.

Extract of a letter from an officer of the Navy, dated
GENOA, *February* 13, 1843.

In one of my last letters I promised to give you a more full description of my visits to and in Genoa. As I commenced my cruise through the city by visiting churches, I may as well despatch them first. Of all the churches that attracted me most, was the church of Carignano; it occupies an elevated site, a little out of the most thickly settled part of the city, and is one of the most conspicuous and interesting objects that attract the attention in the approach to Genoa. It forms an exact square. The architecture is of the Corinthian order, and the ornaments of the four fronts are all alike, with the exception of those over the facade facing the bridge of Carignano. There are three statues; one of the Virgin borne to Heaven by angels, and two others, being those of Peter and Paul by her side. At each extremity of this front rises a lofty belfry, and over the centre of the church is a magnificent dome, said to have been modeled after that of St. Peter's, at Rome. The interior is formed like a Greek cross. The centre dome is supported by four immense pillars, in the niches of which are placed four colossal statues—those of St. Sebastian, St. Bartholomew, B. Allessandro Soali, and St. John the Baptist. This church was built by a private gentleman, a Genoese nobleman, by the name of Sauli; his descendants built a bridge over a deep ravine near the church, so as to render the approach to and from the city much easier.

I cannot give the particulars of the other churches, for we had not time, so I had to content myself with a hasty glance. Those most worthy of note are the Cathedral and the churches of the Annunciation, St. Cyrus and St. Stephen. In the Cathedral is a chapel, called the Chapel of St. John the Baptist; its vault is one glare of gold, and the altar and walls are loaded with a great number of decorations. There is an iron urn preserved in this chapel, which is said to contain the ashes of the saint to which the chapel was dedicated. Our guide told us a curious story about this urn. If the sea is agitated by storm, and this urn is taken to the sea side, the water becomes calm and storms cease. I observed, that was what the priests told him; he said no, for he had seen it done himself. Females are strictly excluded from this chapel, because St. John was beheaded through the influence of a woman. While we were there a French lady and her daughter entered to examine its ornaments more closely, but as soon as the sexton perceived them within the balustrade which separates it from the nave of the church, he hastened to inform them that they were treading on forbidden ground. The church of St. Cyrus is also a magnificent building. The remains of many of the bishops of Genoa and Milan are here interred.

In the number, beauty, and magnificence of its palaces, Genoa surpasses all other Italian cities. The two which excite those who are lovers of architecture and painting, are those of Marcello Durrazzo and Giulio Brignole. The former is one of the noblest edifices, the latter contains the choicest collection of paintings in Genoa. The palace of the Marquis of Serra is not large, but it is remarkable for

containing the richest saloon in Europe. Nothing could be more gorgeous; the decorations alone are said to have cost a million of francs, (nearly $200,000.) It is supported by sixteen marble columns, plated with gold. The vault and every other part of the saloon are as rich as gold and precious stones can make them. The dining hall is remarkable for its construction, being both square and a circle; the circle is formed by a set of round columns, the square by a set of angular ones. In a room communicating between the golden saloon and the dining hall, there is a portrait of the Marchioness, a young lady of the family of Durazzo. If the painter has not flattered her, she must be a paragon of beauty. Some of us were so ravished by the beauty of the picture, that they knelt to do it reverence.

The palace of the Doges is worthy of the men who formerly occupied it; it is a noble structure, encircling a large area or court-yard. The principal stairway leads up to a small apartment, in former times used as a council chamber, where there is a painting of the landing of Columbus in America, and another representing the disembarkation of the ashes of St John the Baptist at Genoa. From this apartment you enter the grand saloon or Senate chamber, which, though less rich in minute decorations than the saloon in the Serra palace, exceeds it by far in magnificence and grandeur. In one of the apartments of this palace is a marble bust of Christopher Columbus, which is said to be an excellent likeness. There is also preserved in this room two letters in his own handwriting; they are written in Spanish. I read a translation of one of them in French; it was dated at Seville, April 2, 1502, a short time previous to his setting sail on his second ill-fated voyage to America. It was addressed to the Bank of St. George, and related chiefly to his family affairs. It commences with a declaration, that next to David, God had been more gracious to him than to any other mortal. He enumerates the honors conferred upon him by his Sovereigns in terms of unaffected modesty, always ascribing the glories of his discoveries to the grace of God. These letters, together with a copy of his privileges, are preserved by the Genoese Government with the most religious care. Genoa is celebrated for the number of its charitable institutions, all of which have splendid endowments.

There are other buildings and institutions in Genoa well worthy the attention of visiters. The University is a noble building; it numbers about 500 students. It has a museum containing an extensive collection of natural curiosities. The library consists of 40,000 volumes, among which there are a number of interesting manuscrips.

The theatre is a noble building; it has six tiers of boxes, and it appears that gold leaf is stuck on every where where it can be seen. The King's box is magnificently furnished.

Genoa also boasts of a number of beautiful gardens. The grounds belonging to the palace of Pallavacini are among those which would repay the trouble of visiting. You here meet grottoes whose sides are composed of pebbles of various colors, fancifully arranged; there are fountains and fish ponds, grass plats, and flower beds, labyrinth walks, and mournful cypress trees. The palace is yet unfinished, and destitute of furniture. I must not omit to mention the villa and botanical gardens of the Marquis de Negro; he has been very hospitable to our officers, and has visited the ship several times. Our ship is visited a great deal; Sunday is the principal day for visiting.

Comm'r Mackenzie.—The steamboat company on the Hudson have presented Comm'r Mackenzie with a like ticket for nine of the largest boats on the river, among which are the Tarrytown boats; and the citizens of Boston are to address him a letter to be presented enclosed in a handsome silver box, and also request that he will sit for his likeness.

Fatal Accident.—Sergeant Watson was killed at Fortress Monroe, on Wednesday last, by the bursting of a gun. He had been for some time attached to the U. S. service and was much esteemed both by the officers and men.—*Norfolk Beacon, May* 26.

ARMY.

OFFICIAL.

War Department, *May* 24, 1843.

In order to obtain the customary information as to the discipline, course of studies, and general state and condition of the Military Academy at West Point, the following officers of the army will compose a board for the inspection of that institution for the present year:

Major General Winfield Scott.
Brevet Brig. General G. M. Brooke, of the Infantry.
Col. James Bankhead, of the Artillery.
Capt. A. Mordecai, Ordnance Department.
Capt. W. H. Swift, Topographical Engineers.
Capt. H. Brewerton, Corps of Engineers.
Capt. L. J. Beall, Rifle Regiment.
Capt. J. C. Casey, Subsistence Department.
Brevet Capt. W. G. Freeman, Adj't Gen's Department.

The board will assemble at West Point, on the 5th day of June next, for the performance of the duty hereby assigned them.

J. M. PORTER, *Secretary of War.*

By order:

R. JONES, *Adjutant General.*

Adjutant General's Office, *May* 24, 1843.

NAVY.

May ORDERS.

24—Passed Assist. Sur. C. A. Hassler, naval hospital, Norfolk.

26—Lieut. F. B. Ellison, navy-yard, New York.
Passed Mid. J. S. Ridgely, receiving-vessel, Baltimore.
Midshipmen A. J. Mitchell, G. V. Fox, F. W. Colby, ship Independence, New York.
Mid. O. C. Badger, D. A. Chever, sloop Saratoga.
Mid. C. Woolley, sloop Levant, Norfolk.
Mid. P. Wager, jr., frigate Macedonian.
Master's Mate, R. P. Robinson, receiving-ship, New York.

27—Lieut. H. T. Wingate, navy-yard, Boston.
Lieut. J. T. McDonough, detached from navy-yard, New York, on account of ill health, with leave two months.
Assis. Sur. J. Wilson, jr., sloop Levant, Norfolk.

Passed Mid. F. Lowry, rendezvous, New York.
Mid. A. MacRae, coast survey under Lt. Blake.

29—Commander John Pope, receiving-ship, Boston.
Lieut. R. C. Cogdell, sloop Decatur, Norfolk.
Lieut. J. J. Almy, frigate Macedonian, Norfolk.
Lieut. J. H. Adams, sloop Levant, Norfolk.
Master's Mate J. T. Power, order to store-ship Lexington revoked, and to receiving-ship, New York.
Mid. J. M. B. Clitz, Depot of Charts, &c.
3d Assist. Eng. T. McDonough, steamer Missouri.
3d Assist. Eng. S. Archbold, steamer Missouri.

30—Lieut. J. M. Lockert, leave two months, and then to be ready to rejoin the Vandalia.
Lieut. John Mooney, order to receiving-ship at Boston revoked on account of ill health.
Lieut. Wm. T. Smith, navy-yard, Washington.
Mid. E. C. Genet, sloop Levant, Norfolk.
Mid. J. E. Jouett, sloop Decatur, Norfolk.
Sailmaker R. C. Rodman, detached from brig Truxtun.

May. APPOINTMENTS.

29—Joseph Wilson, jr., assistant surgeon.
Thomas McDonough, 3d assistant engineer.
Samuel Archbold, 3d assistant engineer.
John Serro, 3d assistant engineer.

May. RESIGNATION.

29—George W. Peete, passed assistant surgeon.

Naval Intelligence.

U. S. VESSELS OF WAR REPORTED.

Sloop of war *Marion*, Comm'r Armstrong, sixteen days from St. Thomas, anchored in Hampton Roads Friday morning. Officers and crew all well.

The *Marion* has been absent nearly six months, during which period she has visited several ports in Central America and the West Indies, and has lost only one of the crew while absent.

The following is a list of her officers:

Commander, Wm. M. Armstrong; Lieutenants, T. W. Brent, O. S. Glisson, G. J. Wyche, C. B. Poindexter; Master, C. St. George Noland; Surgeon, D. C. McLeod; Assistant Surgeon, J. W. Taylor; Passed Midshipmen, Madison Rush, E. L. Winder; Midshipmen, W. Queen, R. D. Minor, W. P. Buckner, P. H. Haywood, J. Seawell, A. W. Johnson, J. McRoberts; Captain's Clerk, —— Stoneall; Acting Prof. of Mathematics, W. De Lacy; Gunner, R. S. King; Boatswain, George Wilmuth; Sailmaker, John Joins; Carpenter, John Overman.

Captain Armstrong has brought home the second mate and ten seamen of ship *Metoka*, of New York, from Liverpool bound to New Orleans, which ship put into St. Thomas on account of the mutinous conduct of the crew. The mutineers will no doubt be given in charge of the U. S. marshal upon the arrival of the *Marion* here.—*Beacon.*

Packet schooner *Flirt*, Lieut. Comd't J. A. Davis, bound to Chagres, arrived at Mayaguez, Porto Rico, on the 16th May, in fourteen days from Charleston. All well.

HOME SQUADRON.—Brig *Boxer*, Lieut. Comd't Bullus, sailed from Pensacola, May 17, on a cruise.

MEDITERRENEAN SQUADRON.—The sloop-of-war *Fairfield* arrived at Marseilles on the 24th of April, in twenty-four hours from Mahon. Officers and crew all well. The following is a list of her officers:

Commander William C. Nicholson; Lieutenants, Charles G. Hunter, Wm. Leigh, C. F. M. Spotswood, Stephen Dod, Edmund Lanier; Purser, Samuel Forrest; Surgeon, J. Frederick Sickles; Master, S. Decatur Trenchard; Professor, M. H. Beecher; Passed Midshipman, Henry Rolando; Midshipmen, Thomas G. Corbin, R. M. Cuyler, John L. Davis, J. McLeod Murphy, Edward Y. McCauley, Alex. R. Simmons, Joseph D. Danels, C. Clark, James M. Rich; Boatswain, William Forrester; Gunner, William Arnold Carpenter, Samuel White; Sailmaker, John Burdine; Master's Mate, S. M. Saunders; Purser's Steward, Lewis Gutz.

The store-ship *Lexington*, bound to the Mediterranean, went to sea from New York on Monday, May 22. The following is a list of her officers:

Lieut. Commanding, William M. Glendy; Lieutenants, Theodore P. Green, Andrew F. V. Gray, William May; Acting Master, Edward C. Anderson; Purser, William Speiden; Passed Assistant Surgeon, John J. Abernethy; Midshipmen, William A. Webb, William W. Roberts, Dawson Phenix; Captain's Clerk, Joseph Hoban; Master's Mate, Coltson Gale; Purser's Clerk, Theodore Quastoff.

PASSENGERS.—Commander Samuel W. Downing, to take command of sloop *Fairfield*, in the Mediterranean; Thomas Hale, Clerk to Comm'r Downing.

A draft of seamen under command of Lieut. Hall, arrived at Norfolk, May 26, in the schooner J. W. Kimpton, Capt. Osborne, from New York. A draft from Baltimore also arrived here in the steamer Jewess, Captain Sutton.—*Beacon.*

PASSENGERS.

CHARLESTON, *May* 21, per brig *Hayne*, from Key West, Lieut. C. Hetzel, of the army. May 22, per steam-packet *Beaufort District*, from Savannah, Lieut. R. H. Bacot, of the army, and lady.

SAVANNAH, *May* 24, per steamer *Gen. Clinch*, from Charleston, Major J. Erving and Captain S. Huger, of the army.

May. ARRIVALS AT WASHINGTON.

26—Captain George Dutton, eng. corps, Gadsby's.
27—Captain M. E. Merrill, 5th infantry, Fuller's.
Lt. Col. R. E. De Russy, eng. corps, Fuller's.
Lieut. C. Hetzel, 8th infantry, Capt. Hetzel's.
Lieut. E. Bradford, 4th artillery, Fuller's.

Deaths.

At Fort Kent, Fish river, Maine, on the 9th ultimo, KATHARINE SOPHIA, aged 18 months, youngest daughter of Captain L. B. WEBSTER, of the army.

On board the U. S. ship Columbus, April 6, of consumption, on her passage from Genoa to Mahon, SAMUEL TODD, aged 23, eldest son of JOHN N. TODD, Esq., Purser U. S. navy.

In Washington, on Friday last, Major CARY SELDEN, aged 60, for many years Naval Storekeeper.

At Louisville, Ky., very suddenly, on the 20th ult., Major ASHER PHILLIPS, formerly a Paymaster in the army, aged 48 years.

FOR SALE AT THIS OFFICE.

SYNOPSIS OF THE CRUISE OF THE EXPLORING EXPEDITION, by its Commander, Lt. Charles Wilkes, with a chart, showing the tracks of the vessels.

BITUMEN: its varieties, properties, and uses, compiled from various sources, by Lieut. H. Wager Halleck, U. S. Corps of Engineers, under the direction of Col. J. G. Totten, Chief Engineer.

SUMMARY OF THE PRINCIPAL CHINESE TREATISES upon the culture of the Mulberry and the rearing of Silk Worms. Translated from the Chinese.

THE ELEMENTS AND PRACTICE OF RIGGING AND SEAMANSHIP. Illustrated with several hundred engravings. In two quarto volumes, of nearly three hundred pages each. London, 1794. One copy, complete, in good condition—price six dollars.